

Rapid Eye

Rapid Response, Long Endurance Unmanned Aircraft System Program

Broad Agency Announcement (BAA) Solicitation 07-57

DATE: November 20, 2007

Defense Advanced Research Projects Agency DARPA/TTO 3701 N. Fairfax Drive Arlington, VA 22203-1714

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Part One: Overview Information

- Federal Agency Name Defense Advanced Research Projects Agency (DARPA), Tactical Technology Office
- Funding Opportunity Title Rapid Eye
- Announcement Type Initial Announcement
- Funding Opportunity Number Broad Agency Announcement (BAA) 07-57
- Catalog of Federal Domestic Assistance Numbers (CFDA) (N/A)
- Dates:
- o Proposal Due: January 23, 2008
- **Description of the funding opportunity:** Rapid Eye is an exploratory development program to develop a persistent Intelligence, Surveillance and Reconnaissance (ISR) system that can be launched to anywhere in the world from an alert pad, reenter and deploy in fewer than 2 orbits and has the ability to loiter for sufficient time to allow other assets to relieve it. This system will provide dramatic new capability to the U.S. military by being able to arrive on station significantly faster than any alternative continental United States (CONUS)-based assets and yet loiter longer than high speed systems. The Rapid Eye system will provide regional ISR coverage with satellite quality imagery for a minimum of 7 hours.

The Rapid Eye program will conduct design trade studies to define an optimal system solution, perform risk reduction on critical technologies including subscale component testing, and conduct a flight test of the end-to-end Rapid Eye system. It is envisioned that this program will at a minimum develop and demonstrate technologies associated with the design of a deployable aircraft with sufficient loiter speed, endurance and power to achieve Rapid Eye performance goals; packaging of a high-aspect ratio aircraft into a rocket fairing; the design of a reentry decelerator with low stowed volume and mass that can slow a reentry vehicle (RV) high in the atmosphere; and the demonstration of efficient propulsion in a low oxygen, low speed environment. The Government is not interested in solutions employing buoyant flight or radioactive power.

The Government is soliciting proposals for a four phase program. The estimates and plans for Phases II-IV will be updated by the end of Phase I. Funding decisions for subsequent phases will be based on a proposal update at the end of Phase I and the satisfaction of programmatic and technical go/no-go criteria.

- Total amount of money to be awarded: The amount of resources made available to this BAA will depend on the quality of the proposals received.
- Anticipated individual awards Multiple awards are anticipated.
- Types of instruments that may be awarded -- Procurement contract or Other Transaction.
- No cost sharing is required for this BAA See Section III-B
- Agency technical contact:

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Part Two: Full Text of Announcement

I. Funding Opportunity Description

The Defense Advanced Research Projects Agency often selects its research efforts through the Broad Agency Announcement (BAA) process. The BAA will appear first on the FedBizOpps website, http://www.fedbizopps.gov/, then the agency website of http://www.darpa.mil/tto/solicitations.htm. The following information is for those wishing to respond to the BAA.

A. Program Overview

The Defense Advanced Research Projects Agency (DARPA) is seeking innovative solutions that will expand the knowledge base and design capabilities for Rapid Eye, a program with the overall goal of developing and demonstrating the ability to rapidly deliver a persistent Intelligence, Surveillance and Reconnaissance (ISR) capability anywhere on the globe and remain on-station until relieved or the mission is completed. It is envisioned that this program will, at a minimum, develop and demonstrate all the technologies necessary for the rocket delivery of a High Altitude Long Endurance (HALE) Unmanned Air Vehicle (UAV). The use of a BAA solicitation allows a wide range of innovative ideas and concepts. The offeror(s) will have the flexibility to develop a tailored program plan that best advances the Rapid Eye program goals.

B. Program Goals

The ability to deploy a persistent ISR platform anywhere in the world through the use of a launch system would provide a dramatic new capability to the US military. The Rapid Eye system will allow the military to rapidly respond world-wide to developing situations and quickly provide decision-makers with the persistent coverage of time-critical events. This capability will permit the military to monitor unexpected events and maintain that coverage until other assets can be put into place.

The Government's point of departure system architecture consists of: (i) rocket delivery of a HALE UAV on a ballistic track to the approximate area of interest (ii) deceleration of the launch package from reentry speeds to the UAV deployment speed, (iii) deployment of the UAV and start of its propulsion system, and (iv) the ability to carry a persistent ISR on-station at high altitudes from the UAV for a minimum of seven hours. The air vehicle ISR payload is nominally 500 lbs installed with a 5kW power requirement. Technologies of interest may include: low ballistic coefficient aerodynamic decelerators; low stored volume, deployable UAV structures; and high efficiency

propulsion systems for vehicles operating at high altitudes. Other advanced technologies may also be developed and demonstrated as required by the architectures proposed by offerors. The Government is interested in an end-to-end design solution for Rapid Eye.

The Rapid Eye program seeks to 1) develop a robust system design that maximizes military utility at a reasonable cost; 2) identify and mature critical enabling technologies; and 3) validate through simulation, ground test and flight demonstration that a Rapid Eye system solution is achievable.

DARPA has established the following non-tradable requirements for the objective Rapid Eye system:

- System must have the capability for worldwide-delivery of a deployable aircraft from an alert pad
- System must use no more than two START treaty-compliant launch sites
- Reentry and deployment of the ISR aircraft must occur within 2 orbits
 - o The system could reenter directly on a ballistic track or allow an additional orbit to increase global coverage
- System must use an existing solid-rocket launch system
 - O DARPA desires a capability that can be launched with minimal modification to the proposed launch system. DARPA will consider proposals that require minor modifications to existing fairing systems (including changes that alter the fairing outer mold line). It is up to the bidder to provide the analysis to support the assertion that the additional cost of changing the fairing (including flight qualification of the modifications) versus the added capability of the system will provide the best value to the Government
- Aircraft must have time-on-station greater than 7 hours
 - O DARPA defines on-station as the continuous capability to carry out the primary mission as defined by the military utility trade studies conducted during Phase I of the program.
- Aircraft must have loiter speed greater than the 99 percentile winds at mission altitude
 - O DARPA defines 99% loiter speed as the speed necessary to have an aggregate probability of remaining on-station for the proposed time-on-station at the proposed operational altitude over 99% of the time given a random launch time and random launch location within the bidder defined global coverage area. The loiter speed requirement is based upon the speed necessary to remain on station against prevailing winds at that altitude. The capability to reposition once deployed, which would require a higher speed, is desirable, but not a specific requirement. The coverage footprint will be determined by the military utility trade studies conducted during Phase I of the program.
- Aircraft payload installed weight must be at least 500 lbs
 - The payload is considered to include all ISR sensors, computational systems and necessary communication systems

- Aircraft must generate an average of at least 5kW dedicated to powering the aircraft payload
- Aircraft must use wing-borne, not buoyant, flight
- Aircraft may not employ radioactive power sources.

DARPA has also determined that the following attributes are desirable for the system but are not requirements for the objective Rapid Eye system:

- Recovery of the aircraft at a friendly or neutral airfield is preferable. In the event that recovery is not possible, the destruction of the payload and sensitive materials/subsystems should be considered.
- Safe disposal of the atmospheric decelerator
- Delivery of the aircraft should be sufficiently accurate to allow immediate commencement of the defined primary mission

Offerors will be asked to explore the design space for the non-tradable and desired attributes to develop their best concept for an objective system design considering military utility, mission management, operations and support, reliability and affordability. Based on this objective system concept, offerors will derive a demonstration system and technology maturation plan that outlines an overall risk reduction strategy for the Rapid Eye system culminating in flight test demonstration.

The Rapid Eye program will be conducted in four phases:

- Phase I: System Conceptual Design, Risk Reduction, and Demonstration Planning
- Phase II: Risk Reduction and Preliminary Design of Demonstration System
- Phase III: Demonstration System Detail Design
- Phase IV: Demonstration System Fabrication and Flight Test

Each phase will progressively mature the design and technologies required to validate the ability to achieve the Rapid Eye system performance goals described above and move incrementally toward the objective system. The following sections describe the specific technical objectives of each phase.

C. Phase I Objectives

The top-level Phase I objectives are as follows:

- Conduct system-level design, concept of operations (CONOPS) and military utility trade studies for the objective Rapid Eye system
- Conduct detailed technology trade studies in areas including launch systems, atmospheric reentry decelerators, and aircraft design. Technologies of concern may include advanced propulsion and deployable structures
- Develop a Rapid Eye Objective System (REOS) conceptual design
- Derive and develop a Rapid Eye Demonstration System (REDS) design (based on the REOS) culminating in SRR
- Develop a detailed Technology Maturation Plan that provides an integrated risk reduction strategy and achieves REDS flight test demonstration in Phase IV

• Optionally perform early risk-reduction on high risk/high payoff technologies, e.g inflatable/deployable wings, low ballistic coefficient re-entry systems, or the use of metal hydride for high altitude propulsion or any other alternative high altitude propulsion system

System level non-tradable design requirements for the REOS were provided in Section B. The system-level design, CONOPS and military utility trade studies will help to further define the REOS conceptual design. Based on the objective system level requirements, the offeror will perform design trade studies on the aircraft and atmospheric decelerator. The objective of this effort is to assess alternative technical approaches from the standpoint of feasibility, performance, and technological maturity. Offerors should define any additional trade studies that may be necessary to help develop an optimal REOS system level conceptual design and define requirements for the atmospheric decelerator and aircraft components. At a minimum, the Government expects the offeror to perform trades in the following areas:

- CONOPS
- Timeline to area of operation from mission go-ahead to system operating on station
- Launch site alternatives
- Launch system selection
- Possible slight fairing modifications
- Global coverage from selected bases
- Reentry decelerator
- Disposal of rocket stages and decelerator
- Aircraft delivery accuracy
- Aircraft deployment alternatives
- Operating altitude and impact on payload performance/utility
- Deployable wing technology and design
- Aircraft propulsion system
- Aircraft thermal management
- Aircraft endurance goal
- Aircraft cruise speed
- Payload packages and capabilities (e.g. resolution and coverage areas)
- Survivability (e.g., altitude, speed, mission planning)
- Recovery strategy for aircraft and/or payload
- Mission success probability
- System reliability
- Affordability (e.g. cost per mission and operations and maintenance cost)
- Supportability including on-pad servicing
- Level of autonomy/mission management approach

The results of the design trade studies will be iterated with the system level design trade studies to come up with a robust final REOS conceptual design. The Government may elect to establish a common set of ground rules and assumptions early in Phase I to ensure that all offerors are conducting consistent analyses.

Based on the final REOS conceptual design, the offeror will derive a REDS design. The goal of the REDS is to enable an affordable flight test demonstration of the key technologies that will validate the potential for full REOS functionality but without all of the features required for an operational vehicle. It is expected that the offeror will implement a rigorous system engineering process and system engineering tools in Phase I for defining and allocating the system requirements from the REOS down to the REDS. These systems engineering processes will extend across all Phases of the program and provide a robust framework for linking and managing all aspects of the REDS design. By the end of Phase I, REDS design shall have sufficient maturity to hold a tailored System Requirements Review, as described in Section I-F.

The REDS conceptual design will be used as the basis for developing a detailed technology maturation plan (TMP) that 1) identifies and assesses critical technologies, processes and system attributes (TPSAs) that constitute the major technical and system integration risks on the program; 2) identifies major Phase II and III risk reduction tests and demonstrations, including subscale component tests in Phases II and III, required to validate the ability to achieve the overall Rapid Eye program goals with a REDS test in Phase IV; 3) defines credible intermediate performance objectives (success criteria) associated with critical tests and demonstrations, and 4) defines an integrated program for systematically reducing risk that meets the Phase II, III and IV objectives, including quantified go/no go criteria at the end of Phases II and III. This TMP is a major Phase I deliverable and will be the foundation of the performer's Phase II, III and IV program plans.

At a minimum, the TMP developed in Phase I shall address the following items during Phase II:

- Demonstration of a propulsion system, including heat rejection, to provide the required electrical power and thrust levels in the representative environment selected by the Phase I military utility analysis
- Demonstration through a representative test of a subscale atmospheric decelerator at the same ballistic coefficient as defined by the REDS design
- Demonstration of subscale wing deployment with the REDS wing loading defined and subsequent pull-up to level flight at the altitude defined by the Phase I military utility analysis

This is not an all inclusive list of risk areas. The contractor is expected to address these items along with other risk areas specific to their system concept and architecture.

The offeror may identify other high risk technologies where subsystem design or independent tests/demonstrations could be conducted with a reasonable budget during Phase I to help advance the technical maturity and ensure feasibility, should that technology be selected for the offeror's REOS. Offerors are asked to propose separate options to the Phase I contract for each technology risk reduction activity. Each option task should include quantifiable success metrics for the risk reduction activities proposed. Risk reduction results must be available not later than 9 months after award to ensure the results are available to support the offeror's Phase II proposal update. The government

will assess these optional tasks individually based on best value to the government and availability of funding.

Specific Phase I deliverables are defined in detail for each 3-month program review in Section I-F, Phase I Schedule and Deliverables.

D. Phase II Objectives

The decision to continue the program into Phase II will be based upon the Government's determination that one or more performers have successfully completed the Phase I exit criteria, defined in Section II-G, as well as the availability of Phase II funds.

In Phase II, the performer will execute its Phase II TMP. It is envisioned that the offeror will perform a significant amount of subsystem/component testing during Phase II. Examples of potential Phase II risk reduction activities include stored wing deployment, wind tunnel and high altitude drop testing; subscale decelerator reentry testing; and engine performance testing at appropriate conditions. Based on the results of the Phase II risk reduction activities, the performer shall update its TMP for Phases III and IV. In parallel, the performer will also continue to mature its REDS design, incorporating any impacts from risk reduction results and culminating in preliminary design review (PDR) at the end of Phase II. As needed, the performer shall also update its REOS, CONOPS and military utility analyses.

Additional Phase II objectives may be established based on the results of Phase I design trade studies and risk reduction activities. The Government intends to provide updated Phase II guidance prior to Phase II proposal update.

E. Phase III and IV Objectives

The decision to continue the program into Phase III will be based upon the Government's determination that one or more performers have successfully completed the Phase II exit criteria as well as the availability of Phase III funds.

In Phase III the performer will continue execution of its TMP. The primary Phase III objective is to complete detail design of the REDS culminating in critical design review (CDR) at the end of Phase III. More detailed Phase III objectives will be developed based on Phase II results and the performer's TMP.

Likewise, the decision to continue the program into Phase IV will be based upon the Government's determination that one or more performers have successfully completed the Phase III exit criteria as well as the availability of Phase IV funds. The objective of Phase IV will be to complete REDS fabrication and conduct flight test demonstration.

F. Phase I Schedule And Deliverables

The Government envisions holding periodic program reviews throughout Phase I. As required, the Government team will also support interim technical interchange meetings

and/or telecons. The Initial Design Review, Final Trade Study and Conceptual Design Update, REDS Design and TMP Review, and REDS SRR shall be conducted at the offeror's facility. The Final TMP and Phase II Proposal Update shall be conducted in the Washington, DC metro area at a Government specified site or the offeror's local facility. The Final TMP and Phase II Proposal Update meeting is envisioned to be a shorter review where the performer will only present its final TMP and Phase II proposal update.

The following sections describe the deliverables desired at each review. The offeror is free to propose an alternate schedule of deliverables as appropriate for its concept for The Initial Deign Review and Final Trade Study and Conceptual Design Update, however the REDS Design and TMP Review, The Final TMP and Phase II Proposal Update, and REDS SRR deliverables should be proposed as described below to ensure the Government is provided with sufficient information to evaluate Phase I exit criteria and make a decision regarding program continuation into Phase II. For risk reduction option tasks, the offeror's proposal should include proposed deliverables for each review as appropriate for each option.

Initial Design Review – Three (3) Months After Award

- Initial Results of CONOPS, System Level and Technology Trades: The performer shall describe in detail the trade studies conducted to develop its notional system CONOPS and develop its REOS conceptual design. At a minimum the performer shall present the results of the trade studies defined in Section I-C. The performer shall present the results of modeling and simulation and other quantitative analyses, as well as the major assumptions. The Government is interested in the process and substantiation for the trades, which are just as important as the results of the trades.
- <u>REOS Conceptual Design</u>: The performer shall conduct a review of its Rapid Eye objective system conceptual design. This review shall include a detailed description of the overall system architecture not just the air vehicle portion of the system.
- Initial Technology Maturation Plan Review: Throughout Phase I, the performer shall develop a Technology Maturation Plan (TMP) to provide the Government with the fiscal and technical information necessary to support a long-term acquisition strategy. The final TMP will define the performer's overall approach to mitigating risk and maturing its Rapid Eye demonstration system design. The TMP should define the major demonstration building blocks that incorporate all risk reduction, technology and process development and maturation, and operational evaluation activities that must be conducted throughout Phases II, III and IV of the program. By the end of Phase I, the plan will also include detailed cost and schedule for these activities, as well as identify any external Government R&D activities that are critical to maturing the system. The initial TMP will explicitly address the following:
 - Risk management process
 - Risk assessment results
 - Critical technologies, processes and system attributes (TPSAs) identified

• <u>Risk Reduction Task Review:</u> If applicable, the performer will describe progress on risk reduction option tasks consistent with proposed deliverables.

Final Trade Study and Conceptual Design Update – Six (6) Months After Award

- <u>Final Results of CONOPS</u>, <u>System Level and Technology Trades</u>: The performer shall provide its final trade study results based on Government feedback at Review 1, as well as lessons learned from subsequent objective and demonstration system design activities.
- Final Rapid Eye Objective System (REOS) Conceptual Design: The performer shall describe its final conceptual design for the objective system. It is expected that a significant portion of the system functional requirements will be established. This review shall provide the outer mold line of the system (with a detailed breakdown of estimated weights), include the arrangements of all major subsystems, and include initial aero-performance analysis that demonstrates that the proposed system meets system level requirements.
- Initial Conceptual Design of Rapid Eye Demonstration System (REDS): The performer shall conduct a review of its initial REDS design. This review should present the quantitative results of design trade studies and risk mitigation assessments that led to the performer's preferred design. This review shall include a detailed description of the overall demonstration system architecture not just the air vehicle portion of the system. The performer should substantiate how the demonstration system design provides direct risk reduction and has legacy to the objective system design. The REDS design should take affordability into account and is not expected to include all of the features that might be present in the REOS (e.g., survivability).
- <u>TMP Review</u>: The performer shall present its updated TMP. By this review, the TMP shall be updated to include a list of major risk reduction building blocks (e.g. simulations, demonstrations, software builds) required to mature each of the TPSAs in support of the Phase IV flight demonstrations.
- <u>Risk Reduction Task Review</u>: If applicable, the performer will describe progress on risk reduction option tasks consistent with proposed deliverables.

REDS Design and TMP Review – Nine (9) Months After Award

- <u>Final Conceptual Design of the REDS</u>: The performer shall describe its final conceptual design for the REDS. It is expected that a draft of all of the system and segment functional requirements will be established and quantified. The performer shall also have completed draft functional flow block diagrams (FFBDs) for the entire system. The design review shall provide the outer mold line of the system (with a detailed breakdown of estimated weights), include the arrangements of all major subsystems, and include initial aero-performance analysis that demonstrates that the proposed system meets system level requirements. The performer shall describe the planned functionality and flight test objectives for the REDS.
- <u>TMP Review</u>: The performer shall present its updated TMP. By this review, the TMP shall include a complete set of risk reduction waterfalls for each critical

- TPSA. The TMP shall also include a list of all proposed Phase II, III and IV risk reduction events, along with the objectives and success metrics for each activity.
- Final Results of Risk Reduction Tasks: If applicable, the performer will describe the final results of its risk reduction option tasks consistent with proposed deliverables. The performer shall review these results against the technical success metrics provided in the proposal and describe any impacts of these results on the REOS and REDS designs.

Final TMP and Phase II Proposal Update – Ten (10) Months After Award

- <u>Final TMP Review:</u> The performer shall present its final TMP. By this review, the TMP shall be finalized to include Phase II, III and IV schedules to at least Work Breakdown Structure (WBS) Level 4, Phase II cost to at least WBS Level 4 and Phase III and IV rough order of magnitude (ROM) costs to at least WBS Level 3.
- Updated Phase II Technical and Cost Proposal Presentation and Submittal

REDS SRR – Twelve (12) Months After Award

- System Requirements Review (SRR) of the REDS: The SRR shall define all aspects of the REDS. The requirements should have direct legacy to the REOS capabilities and the functions required to conduct the demonstrations defined in the TMP. The review encompasses the total system requirements, e.g., launch vehicle, fairing, atmospheric decelerator, air vehicle, mission control, computer software, operations/maintenance, facilities, personnel, and preliminary logistic support considerations. This review should also describe the Systems Engineering Process that produced the system requirements products. Specific review items are as follows:
 - Functional Flow Analysis
 - REDS capabilities, states & modes
 - Final system requirements mapped to performance capabilities
 - o Requirements & Requirements Allocation
 - Final System Requirements with traceability to source and methods proposed to verify/validate requirements.
 - Draft segment requirements
 - Draft interfaces defined and quantified at segment level
 - o Trade Study Results
 - o Integrated Test/Lab Demonstration Planning
 - Test objectives defined
 - Preliminary test planning
 - o Program Risk Analysis
 - Risk management and mitigation planning
 - Risk assessment (e.g. 5x5 risk cube)
 - Technology maturation planning
 - System/segment risk waterfalls
 - Technical Performance Metrics
 - o Demonstrator Design Concept
 - Block diagram

- Schematics
- 3D CAD physical layout to the component level
- Weight estimate/budgets
- Software architecture
- System specification
- System integration approach
- Software & hardware quality assurance planning
- o Mission and Requirements Analysis
 - Design Reference Missions
 - CONOPS
- o Phase II, III and IV Systems Engineering
 - Process
 - Organization
 - Configuration management
- Phase I Final Report: The performer shall submit an annotated briefing detailing all of its Phase I activities.

G. Program Metrics

In order for the Government to evaluate the effectiveness of proposed solutions in achieving the stated program objectives, exit criteria have been established for each program phase. These exit criteria will serve as the basis for determining whether satisfactory progress is being made to warrant continued funding of the program. The Government has identified these metrics with the intention of bounding the scope of the effort, while affording the maximum flexibility, creativity, and innovation in developing proposed solutions. The Government has defined the following exit criteria for Phase I and II. The Phase II exit criteria are preliminary and will be updated based on the military utility analyses and the offerors' TMPs, in conjunction with the Phase II proposal guidance issued during Phase I. Phase III exit criteria shall also be established in the Phase II proposal guidance, based on the offerors' final TMPs.

Phase I Exit Criteria

- REOS conceptual design supported by performance assessment with appropriate analysis, models and simulations to substantiate that:
 - o System uses no more than two START treaty-compliant launch sites
 - System has capability for delivery of a deployable aircraft from an alert pad to over 80% of the world's landmass. Offerors may consider the definition of world landmass to exclude the continental U.S. and Antarctica
 - o Aircraft time-on-station greater than 7 hours
 - o Aircraft loiter speed greater than the 99 percentile winds at mission altitude
 - o Aircraft payload weight allocation of at least 500 lbs installed
 - Aircraft will generate at least 5kW average power dedicated to powering the aircraft payload
 - o Reentry and deployment of the ISR aircraft will occur within 2 orbits

- System uses an existing solid-rocket launch system with minimum modifications
- Analysis of utility of REOS concept in the context of realistic operational scenarios, substantiated by appropriate models and simulations
- Tailored MilSTD SRR of the REDS to include at a minimum:
 - o Acceptable delivery of SRR deliverable items detailed above in Section F
 - o Demonstrated traceability of the REDS design to the REOS
 - o Analytical demonstration that the REDS can support a successful Phase IV flight test demonstration
 - o System level models demonstrating that the REDS SRR design satisfies the size, weight, and power margins
- Updated detailed proposal for Phase II, III and IV, including a TMP that incorporates all risk reduction activities required to meet system objectives. Proposal shall include clearly defined, quantifiable go/no-go criteria for the end of each phase.

Phase II Exit Criteria

- Successful completion of the REDS PDR to include at a minimum:
 - System level models, refined through experimentation, sub-system demonstrations and other technology maturation/validation activities, demonstrating a mission capable REDS PDR design with size, weight, and power margins
- REDS preliminary design supported by performance assessment with appropriate analysis, risk reduction experimentation, modeling and simulations to substantiate that
 - O System uses no more than two START treaty-compliant launch sites
 - System has capability for delivery of a deployable aircraft from an alert pad to over 80% of the world's landmass. Offerors may consider the definition of world landmass to exclude the continental U.S. and Antarctica.
 - o Aircraft time-on-station greater than 7 hours
 - Aircraft loiter speed greater than the 99 percentile winds at mission altitude
 - o Aircraft payload weight allocation of at least 500 lbs installed
 - Aircraft will generate at least 5kW average power dedicated to powering the aircraft payload
 - Reentry and deployment of the ISR aircraft will occur within 2 orbits
 - O System uses an existing solid-rocket launch system with minimum modifications
- Component/subsystem testing, experimentation, and analysis to provide quantitative evidence that the REDS will meet the Phase IV flight test demonstration objectives and meet the go/no-go criteria defined in the TMP. At a minimum, these go/no-go criteria include:
 - Demonstration of a propulsion system, including heat rejection, to provide the PDR-defined electrical power and thrust levels for 7 hours in the representative environment defined by the Phase I analysis

- Demonstration through a representative test of a subscale atmospheric decelerator at the same ballistic coefficient as defined by the REDS design at PDR
- Demonstration of subscale wing deployment and subsequent pull-up to level flight at the mission altitude with the REDS wing loading defined at PDR

II. Award Information

Multiple awards are anticipated. The amount of resources made available under this BAA will depend on the quality of the proposals received and the availability of funds.

The Government reserves the right to select for negotiation all, some, one, or none of the proposals received in response to this solicitation, and to make awards without discussions with offerors. The Government also reserves the right to conduct discussions if the Source Selection Authority later determines them to be necessary. If warranted, portions of resulting awards may be segregated into pre-priced options. Additionally, DARPA reserves the right to accept proposals in their entirety or to select only portions of proposals for award. In the event that DARPA desires to award only portions of a proposal, negotiations will be opened with that offeror. The Government reserves the right to fund proposals in phases with options for continued work at the end of one or more of the phases.

The Government intends to use this BAA award to cover the entirety of the Rapid Eye program and does not plan to conduct a new competition for Phases II, III or IV. During Phase I, the Government will release an updated Phase II statement of objectives. This update will provide additional detail on the objectives, planned schedule/deliverables and proposal guidance for Phase II. The Government intends to provide this information approximately 7 months after Phase I award.

Awards under this BAA will be made to offerors on the basis of the evaluation criteria listed below (see section labeled "Application Review Information", Sec. V.), and program balance to provide overall best value to the Government. Proposals identified for negotiation may result in a Procurement contract or Other Transaction depending upon the nature of the work proposed, the required degree of interaction between parties, and other factors. Offerors should note that the required degree of interaction between parties, regardless of award instrument, will be high and continuous.

III. Eligibility Information

A. Eligible Applicants

All responsible sources capable of satisfying the Government's needs may submit a proposal that shall be considered by DARPA. Historically Black Colleges and Universities (HBCUs), Small Businesses, Small Disadvantaged Businesses and Minority Institutions (MIs) are encouraged to submit proposals and join others in submitting

proposals; however, no portion of this announcement will be set aside for these organizations' participation due to the impracticality of reserving discrete or severable areas of this research for exclusive competition among these entities. Independent proposals from Government/National laboratories may be subject to applicable direct competition limitations, though certain Federally Funded Research and Development Centers are excepted per P.L. 103-337§ 217 and P.L 105-261 § 3136. Proposers from Government/ National Laboratories must provide documentation to DARPA to establish that they are eligible to propose and have unique capabilities not otherwise available in private industry.

Classified participation is limited to U.S. firms. The offeror may include foreign partners or personnel as subcontractors as part of their proposed resources as long as these entities comply with any necessary Non-Disclosure Agreements, Security Regulations, Export Control Laws, and other governing statutes applicable under the circumstances.

1. Procurement Integrity, Standards of Conduct, Ethical Considerations, and Organizational Conflicts of Interest

Certain post-employment restrictions on former federal officers and employees may exist, including special Government employees (including but not limited to Title 18, Section 207, United States Code, the Procurement Integrity Act, 41 U.S.C. 423, and FAR 3.104). Current federal employees are prohibited from participating in particular matters involving conflicting financial, employment, and representational interests (18 USC 203, 205, and 208.) The Program Manager is required to review and evaluate all proposals received under this BAA and to manage all selected efforts.

All offerors and proposed subcontractors must affirm whether they are providing scientific, engineering, and technical assistance (SETA) or similar support to any DARPA technical office(s) through an active contract or subcontract. All affirmations must state which office(s) the offeror supports and identify the prime contract numbers. Affirmations shall be furnished at the time of proposal submission. All facts relevant to the existence or potential existence of organizational conflicts of interest (FAR 9.5) must be disclosed. The disclosure shall include a description of the action the offeror has taken or proposes to take to avoid, neutralize, or mitigate such conflict. In accordance with FAR 9.503 and without prior approval or a waiver from the DARPA Director, a Contractor cannot simultaneously be a SETA and Performer. Proposals that fail to fully disclose potential conflicts of interests or do not have plans to mitigate all conflicts will be returned without technical evaluation and withdrawn from further consideration for award.

If a prospective offeror believes that any conflict of interest exists or may exist (whether organizational or otherwise), the offeror should promptly raise the issue with DARPA by sending offeror's contact information and a summary of the potential conflict by email to the mailbox address for this BAA at BAA07-57@darpa.mil, before time and effort are expended in preparing a proposal and mitigation plan. If, in the sole opinion of the Government after full consideration of the circumstances, any conflict situation cannot be

effectively mitigated, the proposal may be returned without technical evaluation and withdrawn from further consideration for award under this BAA.

B. Cost Sharing/Matching

Cost sharing is not required for this particular program; however, cost sharing will be carefully considered where there is an applicable statutory condition relating to the selected funding instrument (e.g., for any Other Transactions under the authority of 10 U.S.C. § 2371). Cost sharing is encouraged where there is a reasonable probability of a potential commercial application related to the proposed research and development effort.

C. Proposing an Other Transaction

The Government contemplates the award of a Cost-type Procurement contract in accordance with the FAR; however, this BAA affords Offerors the option of submitting proposals for an Other Transaction for Prototype Agreement (OT), as well. Offerors must submit a proposal for a Procurement Contract before any considerations will be given to proposals for an OT. In addition, all proposals for OTs must be in accordance with applicable authority for such an award. The Government reserves the right to negotiate the type of award instrument determined appropriate under the circumstances.

For additional information on OT for Prototype Agreements, including eligibility requirements, please consult the "Other Transactions" (OT) Guide for Prototype Projects available at http://www.acq.osd.mil/dpap/policy/other-transactions.htm.

If an offeror elects to submit an OT proposal, it should submit a third proposal volume entitled, "Volume III, OT Based Delta Proposal". Volume III should discuss how an OT would offer a better value to the Government in the Rapid Eye Program. This volume must outline the extent to which the other transaction will contribute to a broadening of the technology and industrial base available for meeting Department of Defense needs and the extent to which the other transaction will foster new relationships and practices within the technology and industrial base that support the national security of the United States. Volume III should clearly identify changes to the Volume I and II no-cost-share technical and cost proposals that result from use of an OT. If there are no differences, the offeror should state this in Volume III of its proposal. After award selection, OT proposals from the successful offeror(s), if any, will be opened and evaluated. Any cost-share an offeror proposes in Volume III shall be constructed to include distinct, significant, value-added activities covering the entire Rapid Eye program and should leverage the flexibilities offered by OT provisions, instead of providing only a general increase in level of effort.

At a minimum, the following outline shall be used for Volume III:

OT Technical Response: The offeror shall clearly delineate all additional work that can be performed within the OT agreement. The offeror shall provide a top level summary as well as a "red-lined" Statement of Work (SOW) and Integrated Master Schedule (IMS) that highlight any additional tasks being performed as compared to the Volume 1

proposal. The offeror shall ensure that any additional activities build upon the baseline Phase I program to provide compelling additional value to the program (e.g., additional risk reduction tasks and demonstrations, earlier achievement of key milestones, etc.). Offerors must also include a top-level discussion of differences in Phase II and Phase III demonstration plans if executed under an OT.

OT Cost Response: The offeror shall provide cost information in the format described in Appendix A. Offerors must also include a ROM estimate of the potential cost of Phase II and Phase III efforts under an OT agreement, consistent with the Phase II and Phase III plans.

Company Investments: The offeror shall provide a total estimated price for the major cost-share activities associated with the program. The offeror shall clearly state whether these investments are to be included within the agreement and will break out each item (i.e. cash, IR&D, capital, G&A, cost of money, etc).

IV. Application and Submission Information

A. Address to Request Application Package

This announcement contains all information required to submit a proposal. No additional forms, kits, or other materials are needed. This notice constitutes the total BAA. No additional information is available, nor will a formal Request for Proposal (RFP) or additional solicitation regarding this announcement be issued. Requests for same will be disregarded.

B. Content and Form of Application Submission

1. Proposal Information

Proposals not meeting the format described in the BAA may not be reviewed. All administrative correspondence and questions on this solicitation, including requests for information on how to submit a proposal to this BAA, should be directed to <u>BAA07-57@DARPA.MIL</u> or send facsimiles with DARPA/TTO, BAA 07-57 to (703) 696-8401. Questions and answers and other BAA related documents may be found on the BAA website: http://www.darpa.mil/tto/solicitations.htm. DARPA intends to use electronic mail and fax for correspondence regarding BAA 07-57. Proposals may not be submitted by fax or e-mail; any so sent may be disregarded. DARPA encourages use of the Internet for retrieving the BAA and any other related information that may subsequently be provided. See Section IV-C below for submittal instructions.

a) Proposal Format

All proposals must be in the following format. Nonconforming proposals may be rejected without further review. Proposals must be on single-sided pages, written in English, with 1-inch margins (left, right, top, and bottom) in each page. A page is defined as being no larger than 8.5" by 11.0". (Accordion-style foldouts will be counted as multiple pages equivalent to the expanded size.) The body text of the Technical

Proposal shall contain no smaller than 12 point font type. Information presented in tables/graphs and accordion-style fold-outs may use a type font smaller than 12 point as necessary to display such information; however, respondents are cautioned that excessive use of smaller fonts may adversely affect the Government's ability to evaluate such information in a timely fashion. Graphic material shall be embedded in the Word document using GIF or JPEG format. The Cost Proposal shall contain no smaller than 8 point font type and provide requested information in the format described in Appendix A. Larger font type for the Cost Proposal, up to 12 point font type, is desired, where possible. Paper copies of proposals should be stapled or submitted in loose-leaf binder, not bound. Electronic copies shall be submitted on IBM PC-formatted CD-ROM in a format readable with Microsoft Office 2003 or earlier.

A complete proposal shall consist of two volumes—a Technical Proposal (Volume I) and a Cost Proposal (Volume II). Offerors shall submit a total of nine (9) copies of Volume I and nine (9) copies of Volume II in hardcopy as well as two (2) copies of each proposal in electronic format to DARPA. All graphics and tables, as well as the offeror's IMS in MS Project format, shall be included in separate electronic files on the CDs. Respondents need only submit one (1) original signed proposal along with the copies. Each submittal shall reference BAA 07-57. The technical volume may include an attached bibliography of relevant technical papers or research notes (published and unpublished), which document the technical ideas and approach upon which the proposal is based. Copies of not more than three (3) relevant papers can be included with the submission. The bibliography and attached papers (in Section VII of Volume I) are not included in the page counts given below. The submission of other supporting materials along with the proposal is strongly discouraged and will not be considered for review. Sections II-V of Volume I shall not exceed fifty (50) pages total, excluding the offeror's statement of work and integrated master schedule. The page limitation for proposals includes all figures, tables (except the table of contents and front matter), and charts. If the offeror submits a classified addendum, this addendum is also counted towards the 50 page limit. Risk reduction options may be described outside the page count however discussion is limited to one page per option. All pages that exceed the maximum page limit specified will be removed and not be reviewed or considered in the evaluation. The Cost Proposal Volume does not have a page limit.

b) Work Breakdown Structure (WBS)

The offeror shall use a common work breakdown structure for their Statement of Work, Integrated Master Schedule, and cost estimate. For Phase I, all three of these proposal elements should be provided at WBS Level 4. Offerors shall define a Level 4 WBS for use in all program phases, but the government does not anticipate that work will be performed in all WBS areas during Phase I. The SOW, IMS and cost estimate only need to contain entries to WBS level 4 where Phase I work will be performed. Other areas can be marked as "reserved" until used in later phases. Phase II, III and IV work shall be defined to at least WBS level 2 in the Phase I proposal. General guidance regarding WBS and definition of WBS Levels may be found at: https://acc.dau.mil/CommunityBrowser.aspx?id=24855.

c) Volume I, Technical Proposal

The Volume I Technical Proposal shall be organized into seven sections as described below.

Section I. Administrative

- A. Cover sheet to include:
 - (1) BAA number
 - (2) Technical area
 - (3) Lead Organization submitting proposal
- (4) Type of business, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", OR "OTHER NONPROFIT"
 - (5) Contractor's reference number (if any)
 - (6) Other team members (if applicable) and type of business for each
 - (7) Proposal title
- (8) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available)
- (9) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available), total funds requested from DARPA, and the amount of cost share (if any) and
 - (10) Date proposal was submitted.
- B. Official transmittal letter.
- C. {Not included in page count} Table of Contents. The Table of Contents should be keyed to the page numbers of the proposal sections.
- D. {Not included in page count} Additional front matter such as List of Figures, List of Acronyms, etc. if desired.

Section II. Executive Summary

The Executive Summary should provide a short overview of the offeror's proposed Rapid Eye program, including a summary of the Point of Departure (POD) objective system concept, military utility and CONOPS; technical approach; and top-level description of tasks, schedule and cost for each phase.

Section III. Point of Departure Objective System Concept

The offeror should describe its top-level vision of the Rapid Eye system architecture and the notional system concept that will serve as the starting point for its conceptual design in Phase I. The top level vision should be substantiated with first order analysis consistent with this level of design maturity. This is meant to be an initial look that demonstrates the offeror's understanding of the program objectives, performance goals and operational issues. The offeror will describe its top level system vision, major subsystems, and critical technologies integral to achieving its predicted system performance. This design is the starting point for the trades which will be done in Phase I. The Government does not expect the POD to be defined to high fidelity, but, rather, will use this information to gauge the offeror's initial thoughts on how to best meet the program vision and objectives.

Section IV. Overall Scientific Approach

This section provides the detailed discussion of the specific technical aspects of the offeror's proposal.

Section IV shall be organized into the following sections:

- Technical Approach
- Technology Maturation
- Phase I Statement of Work (SOW)
- Phase I Integrated Master Schedule (IMS)
- Phase II, III and IV Program Plans

The Technical Approach section should provide an overview of the offeror's systems engineering processes to be used on the program. It should describe the offeror's approach to progressively refining its POD design into a final objective system design and then deriving a demonstration system conceptual design. Those refinements will be based on a series of concurrent system requirements refinements, military utility analyses, and design trades. This section should describe the overall analysis plan, methodology, system engineering tools, and modeling and simulation tools to be used in the execution of the program. In particular, the offeror shall address its approach for conducting mission success analysis and validation throughout the program, and provide a preliminary analysis of the POD, identifying the proposed goals for its concept.

In the Technology Maturation section, the offeror shall provide an initial list of critical technology risk areas and risk reduction approaches. The offeror shall also describe its formal process for identifying and tracking the risk elements that translate into critical and unique technologies, processes and system attributes associated with its Rapid Eye objective system concept that will form the basis for its TMP. The process should describe a building block approach to incrementally reduce risk through analyses, simulation, ground and flight test demonstrations, etc. to achieve Phase II, III and IV program objectives. The offeror should also describe the process for identifying and evaluating applicable technologies available from other Government and industry R&D programs.

The Phase I SOW will describe all of the tasks the offeror will perform in order to achieve the Phase I exit criteria. The SOW should structure tasks consistent with the WBS defined in b. above detailed to Level 4 and include the deliverables described in Section I-F. The offeror may choose to define work at lower levels to better explain its approach. Any risk reduction optional tasks shall be clearly identified and defined as separate WBS items. This SOW section is not part of the technical page count limit.

The Phase I IMS should provide a detailed, integrated schedule of all Phase I activities, including optional risk reduction tasks if proposed. As with the SOW, the Phase I IMS shall be provided at WBS Level 4. All tasks in the IMS shall be linked and the ability to display the critical path shall be implemented. An electronic copy of the IMS in MS

Project shall be included on the CD proposal submittals. The IMS is not part of the page count.

The offeror's Phases II, III and IV Rapid Eye Program Plans shall include top-level schedules for each phase, based on the offeror's initial proposed risk reduction strategy. It is expected that the Phase II plan will culminate in a PDR of the REDS, and Phase III will end at CDR of the REDS. The offeror should include other key events and demonstrations as appropriate for its concept. The Phase II, III and IV Program Plans shall include ROM cost estimates for each phase to assist the Government in assessing resource requirements for future phases.

Section V. Management

This section will describe the offeror's proposed management process and demonstrate the team's qualifications to conduct all phases of the Rapid Eye program. In particular, the offeror should describe its management construct and corporate capabilities; program team and key personnel; past relevant experience; and approach to intellectual property. The offeror should describe its program management process, including a description of how the team will function and share technical and financial information among the team members and with the Government. The offeror should address corporate capabilities and facilities available across the team. The offeror should describe the proposed program team and demonstrate the team's capability to perform all phases of the Rapid Eye program. Short resumes shall be provided for the Program Manager, Chief Engineer, Military Utility Analysis Lead, Risk Management Lead and lead personnel in key disciplines. The offeror shall identify the number of hours committed for each of these key personnel in Phase I. This section should also include a discussion of the offeror's previous accomplishments and work in this or closely related research areas. Finally, this section should describe the offeror's proposed approach to intellectual property rights. together with supporting rationale of why this approach offers the best value to the Government. This section should list technical data, computer software, and computer software documentation associated with this research effort in which the Government will acquire less than unlimited rights. This section should also include a discussion of patent rights, including necessary background inventions and licenses thereto.

Section VI. Risk Reduction Options

This section shall describe any proposed Phase I risk reduction tasks. This shall include a detailed discussion of the technical objectives of each of the proposed risk reduction tasks, as well as quantifiable success metrics. The offeror shall describe the value of performing these activities during Phase I, as opposed to deferring them until Phase II. There are no limits to the number and types of Risk Reduction Options that an offeror may propose.

Section VII. Additional Information

A brief bibliography of relevant technical papers and research notes (published and unpublished) which document the technical ideas upon which the proposal is based. Copies of not more than three (3) relevant papers can be included in the submission. These papers are not included in the fifty page limit.

d) Volume II, Phase I Cost Proposal – {No Page Limit}

- 1. Cover sheet to include:
 - a) BAA number;
 - b) Lead Organization submitting proposal;
 - c) Type of business, selected among the following categories: "LARGE BUSINESS", "SMALL DISADVANTAGED BUSINESS", "OTHER SMALL BUSINESS", "HBCU", "MI", "OTHER EDUCATIONAL", OR "OTHER NONPROFIT":
 - d) Funds requested from DARPA for the Base Effort, each option and the total proposed cost;
 - e) Contractor's reference number (if any);
 - f) Other team members (if applicable) and type of business for each;
 - g) Proposal title;
 - h) Technical point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), electronic mail (if available);
 - i) Administrative point of contact to include: salutation, last name, first name, street address, city, state, zip code, telephone, fax (if available), and electronic mail (if available);
 - j) Award instrument requested: cost-plus-fixed-free (CPFF), cost-contract—no fee, cost sharing contract—no fee, or other type of Procurement contract (*specify*), or other transaction;
 - k) Place(s) and period(s) of performance;
 - 1) Total proposed cost separated by basic award and option(s) (if any);
 - m) Name, address, and telephone number of the offeror's cognizant Defense Contract Management Agency (DCMA) administration office (*if known*);
 - n) Name, address, and telephone number of the offeror's cognizant Defense Contract Audit Agency (DCAA) audit office (*if known*);
 - o) Any Forward Pricing Rate Agreement, other such Approved Rate Information, or such other documentation that may assist in expediting negotiations (if available);
 - p) All subcontractor proposal backup documentation to include items a. through l. above, as is applicable and available).
 - q) Date proposal was prepared;
 - r) DUNS number;
 - s) TIN number; and
 - t) Cage Code;
 - u) Subcontractor Information; and
 - v) Proposal validity period.
- 2 Detailed cost breakdown in accordance with guidance provided in Appendix A at http://www.darpa.mil/tto/solicitations.htm. Appendix A contains specific table

- formats and instructions for providing summary cost information. Use of this format is required to facilitate timely Government evaluation of the proposal.
- Supporting cost and pricing information shall be provided in the offeror's format. This supporting information must have sufficient detail to substantiate the summary cost tables. Offerors shall include a description of the method used to estimate costs and supporting documentation and provide the basis of estimate for all proposed labor rates, indirect costs, overhead costs, other direct costs and materials, as applicable. Note: "cost or pricing data" as defined in FAR Subpart 15.4 shall be required if the offeror is seeking a Procurement contract award of \$650,000 or greater unless the offeror requests an exception from the requirement to submit cost of pricing data. "Cost or pricing data" are not required if the offeror proposes an award instrument other than a Procurement contract (e.g., a Section 845 Other Transaction.)
- 4 The source, nature, and amount of any industry cost sharing, if applicable. Where the effort consists of multiple phases that could reasonably be partitioned for purposes of funding, these should be identified as options with separate cost estimates for each.
- The cost proposal shall also identify the type of support, if any, the offeror might request from the Government, such as facilities, equipment, or materials, or any such resources that they require in order to execute their SOW. If the Government can make these resources available, the cost of doing so will be added to their proposed direct costs as part of the cost evaluation process.
- 6 The cost proposal shall also provide the names of other federal, state, or local agencies or other parties where the proposal is being submitted, and/or the proposed effort has received funding. If none, so state.

C. Submission Dates and Times

1. Proposal Date

In order to be considered, a full proposal must be submitted to DARPA/TTO no later than 3:00 pm EDST on January 23, 2008. Proposals must be submitted to the DARPA/TTO mailing address identified in this BAA. Proposals must be submitted in hard copy, with one signed original and eight copies, plus two electronic copies on CD-ROMs. Each copy must be clearly labeled with BAA 07-57, offeror organization, proposal title (short title recommended), and Copy x of N. Facsimile or electronic submissions will not be accepted.

Unclassified proposals submitted under this BAA may either be mailed or hand-delivered. Mailing address:

DARPA/TTO ATTN: BAA 07-57 3701 North Fairfax Drive Arlington, VA 22203-1714 Attn: Dr. Wade Pulliam For hand deliveries, the courier shall deliver the package to the DARPA Visitor Control Center at the address specified above. The outer package, as well as the cover page of the proposal, must be marked "Program BAA 07-57".

Offerors are responsible for submitting proposals so as to reach DARPA by 3:00 pm EDST, Arlington, VA, on January 23, 2008. Any proposal received at DARPA after the exact time specified for receipt of offers will be treated as "late" and will not be considered, unless there is acceptable evidence to establish that it was received at DARPA and was under the Government's control prior to the time set for receipt of offers. Acceptable evidence to establish the time of receipt at DARPA includes the time/date stamp of that installation on the proposal wrapper, other documentary evidence of receipt maintained by the installation, or oral testimony or statements of Government personnel.

If an emergency or unanticipated event interrupts normal Government processes so that proposals cannot be received at DARPA by the exact time specified in the solicitation, and urgent Government requirements preclude amendment of the solicitation, the time specified for receipt of proposals will be deemed to be extended to 3:00 PM EDST Arlington, VA, on the first work day on which normal Government processes resume.

Proposals may be withdrawn by written notice received at any time before award. Withdrawals are effective upon receipt of notice by the Contracting Officer.

Classified responses shall be submitted in accordance with directions in Section VI.

Proprietary Data: All responses containing proprietary data should be appropriately marked. It is the respondent's responsibility to clearly define to the Government what they consider to be proprietary data. Responses to this BAA will not be returned.

V. Application Review Information

A. Evaluation Criteria

The criteria to be used to evaluate and select proposals are described in the following paragraphs. Proposals submitted in response to this BAA will be evaluated against the following criteria, in descending order of importance: 1) Point of Departure (POD) Concept and Substantiation; 2) Overall Scientific Approach, 3) Management and Program Team; and 4) Cost. Each proposal will be evaluated on the merit and relevance of the specific proposal as it relates to the program rather than against other proposals for research in the same general area as no common statement of work exists. Selections for award will be made based on best value to the Government.

The bulleted lists under individual factors and subfactors are specific areas of evaluation to be assessed in conjunction with these criteria.

1. Point of Departure Objective System Concept and Substantiation

- Extent to which the offeror's POD concept reflects an understanding of the Rapid Eye program goals, system requirements and performance goals.
- Extent to which the offeror's POD concept satisfies the following attributes:
 - System has capability for worldwide-delivery of a deployable aircraft from an alert pad
 - System uses no more than two START treaty-compliant launch sites
 - System uses an existing solid-rocket launch system
 - Reentry and deployment of the ISR aircraft will occur within 2 orbits
 - Aircraft time-on-station greater than 7 hours
 - Aircraft has loiter speed greater than the 99 percentile winds at mission altitude
 - Aircraft payload weight of at least 500 lbs installed
 - Aircraft will generate an average of at least 5kW dedicated to powering the aircraft payload
 - Aircraft uses wing-borne, not buoyant, flight
 - Aircraft does not employ radioactive power sources
- Extent to which the offeror's POD concept and its system capabilities has military utility.
- Extent to which the POD concept is innovative, feasible, and achievable within the offeror's proposed program schedule and ROM costs.
- Extent to which POD concept performance attributes are substantiated via analysis or previous experimental work.

2. Overall Scientific Approach

a) Technical Approach

- Extent to which the proposed military utility analyses and CONOPS development approach will identify major attributes of the objective Rapid Eye system and support generation of system requirements
- Extent to which the proposed design trade studies will fully explore the available design trade space
- Extent to which the proposed technology trade studies assess the full range of technical solutions
- Extent to which the proposed design tools and trade study process will yield a robust system design.
- Extent to which the offeror has identified a robust process for deriving an affordable REDS design from the REOS design.

• Extent to which the offeror has a robust system engineering process for achieving SRR of the REDS in Phase I

b) Technology Maturation Approach

- Extent to which the proposal identifies the major technical risks in the development of the Rapid Eye system and the planned mitigation efforts.
- Extent to which the offeror's proposed process for identifying and evaluating critical enabling technologies, processes and system attributes (TPSAs), assessing competing technologies and developing a formal Technology Maturation Plan will result in a comprehensive, detailed plan at the end of Phase I that provides confidence in offeror's ability to mature the Rapid Eye Demonstration System design and provides sufficient data for a Government decision regarding Phase II.
- Extent to which Phase I risk reduction option task has clearly defined success metrics, is design independent, and provides valuable technical contribution in advance of SRR (if applicable) at reasonable cost

c) Phase I Statement of Work (SOW) and Integrated Master Schedule (IMS)

- Extent to which the task descriptions and associated technical elements provided are complete and in a logical sequence with all proposed deliverables clearly defined.
- Extent to which the SOW details activities to WBS Level 4, and is traceable to the IMS tasks and the Cost Proposal detailed estimates.
- Extent to which SOW shows a credible technical approach to achieving the Phase I Exit Criteria
- Extent to which the proposed schedule is complete and achievable.
- Extent to which Phase I IMS is detailed to Level 4.
- Extent to which the IMS captures all the SOW tasks, shows the dependencies among the tasks, and correctly displays the critical path.

d) Phase II, III and IV Program Plans

• Extent to which the proposed Phase II, III and IV program plans meet the Phase II, III and IV top level objectives with reasonable scope, schedule, technical risk and cost.

3. Management and Program Team

- Professional capabilities and relevant experience of key personnel, including Program Manager, Chief Engineer, Military Utility Analysis Lead, Risk Management Lead and other proposed technology area leads
- Extent to which hours proposed for key personnel are consistent with described program roles
- Extent to which proposed team has previous experience on flight demonstration programs with a similar level of complexity to Rapid Eye

- Extent to which the proposed team has the ability to accomplish all phases of the Rapid Eye program
- Extent to which proposed management construct provides adequate opportunities for addressing technical, schedule and cost issues with the Government team
- Extent to which proposed management organization and lines of authority provide adequate communication across the program team and with the Government team.
- Extent to which offeror's proposed intellectual property and data rights are consistent with the Government's need to be able to communicate program information across Government organizations and to support transition of the program to the users at a reasonable cost.

4. Cost

- Extent to which proposed cost information is complete, substantiated and realistic for the technical and management approach offered
- Extent to which Phase I costs are consistent with the SOW and IMS and are detailed to Level 4
- Extent to which proposed costs are reasonable and consistent with the level of effort described in the offeror's SOW and IMS and the effort required to achieve the Phase I exit criteria.

After selection and before award the contracting officer will negotiate and validate cost/price reasonableness. The Government may make awards without discussions. Award(s) will be made to offerors whose proposals are determined to be the most advantageous to the Government, all factors considered, including the potential contributions of the proposed work to the overall research program and the availability of funding for the effort. Award(s) may be made to any offeror(s) whose proposal(s) is determined selectable, regardless of its overall rating.

NOTE: OFFERORS ARE CAUTIONED THAT EVALUATION SCORES MAY BE LOWERED AND/OR PROPOSALS REJECTED IF SUBMITTAL INSTRUCTIONS ARE NOT FOLLOWED.

B. Review and Selection Process

It is the policy of DARPA to ensure impartial, equitable, comprehensive proposal evaluations and to select the source (or sources) whose offer meets the Government's technical, policy, and programmatic goals. Pursuant to FAR 35.016, the primary basis for selecting proposals for acceptance shall be technical, importance to agency programs, and fund availability. In order to provide the desired evaluation, qualified Government personnel will conduct reviews and (if necessary) convene panels of experts in the appropriate areas.

Proposals will not be evaluated against each other, since they are not submitted in accordance with a common statement of work. DARPA's intent is to review proposals as

soon as possible after they arrive; however, proposals may be reviewed periodically for administrative reasons. For evaluation purposes, a proposal is the document described in "Proposal Information", Section IV-B. Other supporting or background materials submitted with the proposal will be considered for the reviewer's convenience only and not considered as part of the proposal.

Subject to the restrictions set forth in FAR 37.203(d), input on technical aspects of the proposals may be solicited by DARPA from non-Government consultants /experts who are strictly bound by the appropriate non-disclosure requirements.

It is the policy of DARPA to treat all proposals as competitive information and to disclose their contents only for the purpose of evaluation. No proposals will be returned. Upon completion of the source selection process, the original of each proposal received will be retained at DARPA and all other copies will be destroyed.

All proposals should clearly indicate limitations on the disclosure of their contents. They may be marked with an appropriate legend that includes the term "Proprietary" or words to that effect. Markings like "Company Confidential" or other phrases that may be confused with national security classifications shall be avoided. For Procurement contracts issued under the FAR/DFARS, the Government typically uses the legend: "SOURCE SELECTION INFORMATION – SEE FAR 3.104". For non FAR/DFARS contemplated award actions, the Government typically uses the legend: "SOURCE SELECTION INFORMATION – COMPETITION SENSITIVE - GOVERNMENT ONLY."

VI. Award Administration Information

A. Award Notices

As soon as the evaluation of a proposal is complete, the offeror will be notified that 1) the proposal has been selected for funding pending contract negotiations, or 2) the proposal has not been selected. These official notifications will be sent to the Technical POC identified on the proposal cover sheet.

B. Administrative and National Policy Requirements

1. Security

If proposals are classified, the proposals must indicate the classification level of not only the proposal itself, but also the anticipated award document classification level.

The Government desires that proposals submitted under this BAA will be unclassified. In the event that an offeror believes that classified information is required to substantiate their POD concept, the offeror may submit a classified addendum to their proposal. If the offeror chooses to submit a classified addendum, the following information is applicable.

Security classification guidance on a DD Form 254 will not be provided at this time since DARPA is soliciting ideas only. After reviewing the incoming proposals, if a determination is made that the award instrument may result in access to classified information, a DD Form 254 will be issued and attached as part of the award. Offerors choosing to submit a classified proposal must first receive permission from the Original Classification Authority to use their information in replying to this BAA. Applicable classification guide(s) should be submitted to ensure that the proposal is protected appropriately.

Classified submissions shall be in accordance with the following guidance:

Collateral Classified Information: Use classification and marking guidance provided by previously issued security classification guides, the Information Security Regulation (DoD 5200.1-R), and the National Industrial Security Program Operating Manual (DoD 5220.22-M) when marking and transmitting information previously classified by another original classification authority. Classified information at the Confidential and Secret level may only be mailed via U.S. Postal Service (USPS) Registered Mail or U.S. Postal Service Express Mail. All classified information will be enclosed in opaque inner and outer covers and double wrapped. The inner envelope shall be sealed and plainly marked with the assigned classification and addresses of both sender and addressee. The inner envelope shall be address to:

Defense Advanced Research Projects Agency ATTN: Tactical Technology Office Reference: BAA 07-57 3701 North Fairfax Drive Arlington, VA 22203-1714

The outer envelope shall be sealed with no identification as to the classification of its contents and addressed to:

Defense Advanced Research Projects Agency Security & Intelligence Directorate, Attn: CDR 3701 North Fairfax Drive Arlington, VA 22203-1714

All Top Secret materials should be hand carried via an authorized, two-person courier team to the DARPA CDR.

Special Access Program (SAP) Information: Offerors intending to submit SAP proposal information must notify DARPA within 3 weeks after BAA release. Contact the DARPA Special Access Program Central Office (SAPCO) 703-526-6614 for further guidance and instructions prior to transmitting SAP information to DARPA. Top Secret SAP, must be transmitted via approved methods for such material. Consult the DoD Overprint to the National Industrial Security Program Operating Manual for

further guidance. *Prior to transmitting SAP material*, it is strongly recommended that you coordinate your submission with the DARPA SAPCO.

Sensitive Compartmented Information (SCI) Data: Contact the DARPA Special Security Office (SSO) at 703-812-1994/1984 or 703-248-7318 for the correct SCI courier address and instructions. All SCI should be transmitted through your servicing Special Security Officer (SSO). SCI data must be transmitted through SCI channels only (i.e., approved SCI Facility to SCI facility via secure fax).

Proprietary Data: All proposals containing proprietary data should have the cover page and each page containing proprietary data clearly marked as containing proprietary data. It is the offeror's responsibility to clearly define to the Government what is considered proprietary data.

Offerors must have existing and in-place prior to execution of an award, approved capabilities (personnel and facilities) to perform research and development at the classification level they propose. It is the policy of DARPA to treat all proposals as competitive information, and to disclose their contents only for the purpose of evaluation. Proposals will not be returned. The original of each proposal received will be retained at DARPA and all other non-required copies destroyed. A certification of destruction may be requested, provided that the formal request is received at this office within 5 days after unsuccessful notification.

2. Intellectual Property

a) Procurement Contract Offerors

(1) Noncommercial Items (Technical Data and Computer Software)

Offerors responding to this BAA requesting a Procurement contract to be issued under the FAR/DFARS, shall identify all noncommercial technical data, and noncommercial computer software that they plan to generate, develop, and/or deliver under any proposed award instrument in which the Government will acquire less than unlimited rights, and to assert specific restrictions on those deliverables. Offerors shall follow the format under DFARS 252.227-7017 for this stated purpose. In the event that offerors do not submit the list, the Government will assume that it automatically has "unlimited rights" to all noncommercial technical data and noncommercial computer software generated. developed, and/or delivered under any award instrument, unless it is substantiated that development of the noncommercial technical data and noncommercial computer software occurred with mixed funding. If mixed funding is anticipated in the development of noncommercial technical data, and noncommercial computer software generated. developed, and/or delivered under any award instrument, then offerors should identify the data and software in question, as subject to Government Purpose Rights (GPR). In accordance with DFARS 252.227-7013 Rights in Technical Data - Noncommercial Items, and DFARS 252.227-7014 Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation, the Government will automatically assume that any such GPR restriction is limited to a period of five (5) years in accordance with the applicable DFARS clauses, at which time the Government will acquire "unlimited rights" unless the parties agree otherwise. Offerors are admonished that the Government will use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the offeror, as may be necessary, to evaluate the offeror's assertions. If no restrictions are intended, then the offeror should state "NONE."

Specific definitions as follows per DFARS 252.227-7013 Rights in Technical Data - Noncommercial Items:

"Government purpose rights" means the rights to—

- (i) Use, modify, reproduce, release, perform, display, or disclose technical data within the Government without restriction; and
- (ii) Release or disclose technical data outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose that data for United States government purposes.

"Limited rights" means the rights to use, modify, reproduce, release, perform, display, or disclose technical data, in whole or in part, within the Government. The Government may not, without the written permission of the party asserting limited rights, release or disclose the technical data outside the Government, use the technical data for manufacture, or authorize the technical data to be used by another party, except that the Government may reproduce, release or disclose such data or authorize the use or reproduction of the data by persons outside the Government if reproduction, release, disclosure, or use is—

- (i) Necessary for emergency repair and overhaul; or
- (ii) A release or disclosure of technical data (other than detailed manufacturing or process data) to, or use of such data by, a foreign government that is in the interest of the Government and is required for evaluational or informational purposes;
- (iii) Subject to a prohibition on the further reproduction, release, disclosure, or use of the technical data; and
- (iv) The contractor or subcontractor asserting the restriction is notified of such reproduction, release, disclosure, or use.

"Technical data" means recorded information, regardless of the form or method of the recording, of a scientific or technical nature (including computer software documentation). The term does not include computer software or data incidental to contract administration, such as financial and/or management information.

"Unlimited rights" means rights to use, modify, reproduce, perform, display, release, or disclose technical data in whole or in part, in any manner, and for any purpose whatsoever, and to have or authorize others to do so.

Specific definitions as follows per DFARS 252.227-7014 Rights in Noncommercial Computer Software and Noncommercial Computer Software Documentation:

"Government purpose rights" means the rights to—

- (i) Use, modify, reproduce, release, perform, display, or disclose computer software or computer software documentation within the Government without restriction; and
- (ii) Release or disclose computer software or computer software documentation outside the Government and authorize persons to whom release or disclosure has been made to use, modify, reproduce, release, perform, display, or disclose the software or documentation for United States government purposes.

"Restricted rights" apply only to noncommercial computer software and mean the Government's rights to—

- (i) Use a computer program with one computer at one time. The program may not be accessed by more than one terminal or central processing unit or time shared unless otherwise permitted by this contract;
- (ii) Transfer a computer program to another Government agency without the further permission of the Contractor if the transferor destroys all copies of the program and related computer software documentation in its possession and notifies the licensor of the transfer. Transferred programs remain subject to the provisions of this clause:
- (iii) Make the minimum number of copies of the computer software required for safekeeping (archive), backup, or modification purposes;
- (iv) Modify computer software provided that the Government may—

- (A) Use the modified software only as provided in paragraphs (a)(14)(i) and (iii) of this clause; and
- (B) Not release or disclose the modified software except as provided in paragraphs (a)(14)(ii), (v) and (vi) of this clause;
- (v) Permit contractors or subcontractors performing service contracts (see 37.101 of the Federal Acquisition Regulation) in support of this or a related contract to use computer software to diagnose and correct deficiencies in a computer program, to modify computer software to enable a computer program to be combined with, adapted to, or merged with other computer programs or when necessary to respond to urgent tactical situations, provided that—
 - (A) The Government notifies the party which has granted restricted rights that a release or disclosure to particular contractors or subcontractors was made;
 - (B) Such contractors or subcontractors are subject to the use and non-disclosure agreement at 227.7103-7 of the Defense Federal Acquisition Regulation Supplement (DFARS) or are Government contractors receiving access to the software for performance of a Government contract that contains the clause at DFARS 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends;
 - (C) The Government shall not permit the recipient to decompile, disassemble, or reverse engineer the software, or use software decompiled, disassembled, or reverse engineered by the Government pursuant to paragraph (a)(14)(iv) of this clause, for any other purpose; and
 - (D) Such use is subject to the limitation in paragraph (a)(14)(i) of this clause; and
- (vi) Permit contractors or subcontractors performing emergency repairs or overhaul of items or components of items procured under this or a related contract to use the computer software when necessary to perform the repairs or overhaul, or to modify the computer software to reflect the repairs or overhaul made, provided that—

- (A) The intended recipient is subject to the use and non-disclosure agreement at DFARS 227.7103-7 or is a Government contractor receiving access to the software for performance of a Government contract that contains the clause at DFARS 252.227-7025, Limitations on the Use or Disclosure of Government-Furnished Information Marked with Restrictive Legends; and
- (B) The Government shall not permit the recipient to decompile, disassemble, or reverse engineer the software, or use software decompiled, disassembled, or reverse engineered by the Government pursuant to paragraph (a)(14)(iv) of this clause, for any other purpose.

"Unlimited rights" means rights to use, modify, reproduce, release, perform, display, or disclose computer software or computer software documentation in whole or in part, in any manner and for any purpose whatsoever, and to have or authorize others to do so.

A sample list for complying with this request is as follows:

NONCOMMERCIAL					
Technical Data or	Basis for Assertion	Asserted Rights	Name of Person Asserting		
Computer Software To		Category	Restrictions		
be Furnished With		•			
Restrictions					
(LIST)	(LIST)	(LIST)	(LIST)		

(2) Commercial Items (Technical Data and Computer Software)

Offerors responding to this BAA requesting a Procurement contract to be issued under the FAR/DFARS, shall identify all commercial technical data, and commercial computer software that may be embedded in any noncommercial deliverables contemplated under the research effort, along with any applicable restrictions on the Government's use of such commercial technical data and/or commercial computer software. In the event that offerors do not submit the list, the Government will assume that there are no restrictions on the Government's use of such commercial items. The Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the offeror, as may be necessary, to evaluate the offeror's assertions. If no restrictions are intended, then the offeror should state "NONE."

A sample list for complying with this request is as follows:

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Technical Data or	Basis for Assertion	Asserted Rights	Name of Person Asserting
Computer Software To	·	Category	Restrictions
be Furnished With			
Restrictions			
(LIST)	(LIST)	(LIST)	(LIST)

b) NonProcurement Contract Offerors -Noncommercial and Commercial Items (Technical Data and Computer Software)

Offerors responding to this BAA requesting an Other Transaction for Prototype shall follow the applicable rules and regulations governing these various award instruments, but in all cases should appropriately identify any potential restrictions on the Government's use of any Intellectual Property contemplated under those award instruments in question. This includes both Noncommercial Items and Commercial Items. Although not required, offerors may use a format similar to that described in Paragraphs 1.a and 1.b above. The Government may use the list during the source selection evaluation process to evaluate the impact of any identified restrictions, and may request additional information from the offeror, as may be necessary, to evaluate the offeror's assertions. If no restrictions are intended, then the offeror should state "NONE."

c) All Offerors – Patents

Include documentation proving your ownership of or possession of appropriate licensing rights to all patented inventions (or inventions for which a patent application has been filed) that will be utilized under your proposal for the DARPA program. If a patent application has been filed for an invention that your proposal utilizes, but the application has not yet been made publicly available and contains proprietary information, you may provide only the patent number, inventor name(s), assignee names (if any), filing date, filing date of any related provisional application, and a summary of the patent title, together with either: 1) a representation that you own the invention, or 2) proof of possession of appropriate licensing rights in the invention.

d) All Offerors-Intellectual Property Representations

Provide a good faith representation that you either own or possess appropriate licensing rights to all other intellectual property that will be utilized under your proposal for the DARPA program. Additionally, offerors shall provide a short summary for each item asserted with less than unlimited rights that describes the nature of the restriction and the intended use of the intellectual property in the conduct of the proposed research.

3. Meeting and travel requirements

Awardees under this BAA will be required to present an overview of their proposed work at a Program Kick-off Meeting at their facility to address any updates from the proposal.

Thereafter, quarterly progress review and technical interchange meetings will be held. Additional information regarding reviews and meetings is provided in the Phase I Schedule and Deliverables section above.

4. Human use

Proposals selected for contract award are required to comply with provisions of the Common Rule (32 CFR 219) on the protection of human subjects in research (http://www.dtic.mil/biosys/downloads/32cfr219.pdf) and the Department of Defense Directive 3216.2 (http://www.dtic.mil/whs/directives/corres/html2/d32162x.htm). All proposals that involve the use of human subjects are required to include documentation of their ability to follow Federal guidelines for the protection of human subjects. This includes, but is not limited to, protocol approval mechanisms, approved Institutional Review Boards, and Federal Wide Assurances. These requirements are based on expected human use issues sometime during the entire length of the proposed effort.

For proposals involving "greater than minimal risk" to human subjects within the first year of the project, offerors must provide evidence of protocol submission to a federally approved IRB at the time of final proposal submission to DARPA. For proposals that are forecasted to involve "greater than minimal risk" after the first year, a discussion on how and when the offeror will comply with submission to a federally approved IRB needs to be provided in the submission. More information on applicable federal regulations can be found at the Department of Health and Human Services – Office of Human Research Protections website (http://www.dhhs.gov/ohrp/).

Any aspects of a proposal involving human use should be specifically called out as a separate element of the statement of work and cost proposal to allow for independent review and approval of those elements.

5. Animal Use

Any Recipient performing research, experimentation, or testing involving the use of animals shall comply with the rules on animal acquisition, transport, care, handling, and use in: (i) 9 CFR parts 1-4, Department of Agriculture rules that implement the Laboratory Animal Welfare Act of 1966, as amended, (7 U.S.C. 2131-2159); and (ii) the guidelines described in National Institutes of Health Publication No. 86-23, "Guide for the Care and Use of Laboratory Animals."

6. Publication approval

The following provision will be incorporated into any resultant Procurement contract or other transaction:

When submitting material for written approval for open publication as described in subparagraph (a) above, the Contractor/Awardee must submit a request for public release to the DARPA TIO and include the following information: 1) Document Information: document title, document author, short plain-language description of technology discussed in the material (approx. 30 words), number of pages (or minutes of video) and document type (briefing, report, abstract, article, or paper); 2) Event Information: event type (conference, principle investigator

meeting, article or paper), event date, desired date for DARPA's approval; 3) DARPA Sponsor: DARPA Program Manager, DARPA office, and contract number; and 4) Contractor/Awardee's Information: POC name, e-mail and phone. Allow four weeks for processing; due dates under four weeks require a justification. Unusual electronic file formats may require additional processing time. Requests can be sent either via e-mail to tio@darpa.mil or via 3701 North Fairfax Drive, Arlington VA 22203-1714, telephone (571) 218-4235. Refer to www.darpa.mil/tio for information about DARPA's public release process.

7. Export Control

Should this project develop beyond fundamental research (basic and applied research ordinarily published and shared broadly within the scientific community) with military or dual-use applications the following apply:

- (1) The Contractor shall comply with all U. S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, for obtaining the appropriate licenses or other approvals, if required, for exports of (including deemed exports) hardware, technical data, and software, or for the provision of technical assistance.
- (2) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at any Government installation (whether in or outside the United States), where the foreign person will have access to export-controlled technical data or software.
- (3) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.
- (4) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

8. Subcontracting

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy. Each offeror who submits a proposal for a Procurement contract in accordance with the FAR that includes subcontractors is required to submit a subcontracting plan in accordance with FAR 19.702(a) (1) and (2) should do so with their proposal. The plan format is outlined in FAR 19.704. This requirement does not apply to offerors classified as "small business concerns" as defined at FAR 19.001.

C. Reporting Requirements

The number and types of reports will be specified by the contractor in their proposal, but will include as a minimum monthly financial status reports. The reports shall be prepared and submitted in accordance with the procedures contained in the award document and mutually agreed on before award. Reports and briefing material will also be required as appropriate to document progress in accomplishing program metrics. These reports should be aligned with the Review schedule and corresponding deliverables specified above. A Final Report that summarizes the project and tasks will be required at the conclusion of the performance period for the award, notwithstanding the fact that the research may be continued under a follow-on vehicle.

1. Central Contractor Registration

Selected offerors not already registered in the Central Contractor Registry (CCR) will be required to register in CCR prior to any award under this BAA. Information on CCR registration is available at http://www.ccr.gov.

2. Representations and Certifications

In accordance with FAR 4.1201, prospective offerors shall complete electronic annual representations and certifications at http://orca.bpn.gov.

3. Wide Area WorkFlow (WAWF)

Unless using another approved electronic invoicing system, offerors will be required to submit invoices for payment directly via the Internet/WAWF at http://wawf.eb.mil. Registration to WAWF will be required prior to any award under this BAA.

VII. Agency Contacts

Administrative, technical or contractual questions should be sent via e-mail to BAA07-57@darpa.mil. If e-mail is not available, fax questions to 703-696-8401, Attention: BAA 07-57. All requests must include the name, email address, and phone number of a point of contact.

Points of Contact

The technical POC for this effort is Dr. Wade Pulliam,

Electronic mail: BAA07-57@darpa.mil

DARPA/TTO

ATTN: BAA 07-57

3701 North Fairfax Drive

Arlington, VA 22203-1714

FAX: 703-696-8401

VIII. Other Information

A. None